Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A chemical hydride hydrogen generation system, comprising:

a storage means for storing a chemical hydride solution comprising a solution of chemical hydride solute in a solvent;

a supply of the chemical hydride solution stored in the storage means;

a reactor containing a catalyst, for catalyzing a reaction of the chemical hydride to generate hydrogen; and

a first supplying device, connected between the storage means and the reactor, for supplying the chemical hydride solution from said storage means to said reactor so that the chemical hydride solution reacts to generate hydrogen in the presence of the catalyst and for returning the chemical hydride solution to the storage means;

wherein the system further includes delivery means for delivering additional solvent to the chemical hydride solution, as the chemical hydride is consumed in use.

Claim 2 (currently amended): A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution,~~ wherein the chemical hydride solution is a borohydride water solution.

Claim 3 (currently amended): A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution~~ wherein the chemical hydride solution is a water solution in which the solute is in the form of $MB[x]_x H[y]_y$, wherein M is a metal.

Claim 4 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 3, wherein the solute is selected from the group consisting of: $NaBH_4$, $LiBH_4$, KBH_4, and $RbBH_4$.

Claim 5 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution,~~ wherein the chemical hydride solution is a water solution in which the solute comprises $NaBH_4$ and $LiBH_4$ comprising less than 5% by weight.

Claim 6 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution,~~ wherein the chemical hydride solution is a water solution in which the solute is NH_3BH_3.

Claim 7 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution,~~ wherein the chemical hydride solution further includes a freezing point depressing agent.

Claim 8 (original) A chemical hydride hydrogen generation system as claimed in claim 7, wherein the freezing point depressing agent is glycerol.

Claim 9 (original) A chemical hydride hydrogen generation system as claimed in claim 8, wherein concentration of glycerol is less than 5% by weight.

Claim 10 (original) A chemical hydride hydrogen generation system as claimed in claim 9, wherein concentration of glycerol is 1% by weight.

Claim 11 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 1, ~~including the chemical hydride solution,~~ wherein the chemical hydride solution further includes alkaline additives.

Claim 12 (previously presented) A chemical hydride hydrogen generation system as claimed in claim 11, wherein the alkaline additive is selected from the group consisting of LiOH, KOH, and NaOH.

Claim 13 (original) A chemical hydride hydrogen generation system as claimed in claim 11, wherein the alkaline additive is 0.1% NaOH by weight.

Claim 14 (currently amended) A chemical hydride hydrogen generation system comprising:

a storage means for storing a chemical hydride solution comprising a solution of chemical hydride solute in a solvent;

a supply of the chemical hydride solution stored in the storage means;

a reactor containing a catalyst, for catalyzing a reaction of the chemical hydride to generate hydrogen; and

a first supplying device, connected between the storage means and the reactor, for supplying the chemical hydride solution from said storage means to said reactor so that the chemical hydride solution reacts to generate hydrogen in the presence of the catalyst;

a return line for the solution between the storage means and the reactor, and a flow control device that operatively stops said first supplying ~~means~~ device when the hydrogen pressure in the said reactor reaches a first value and activates the said first supplying device when the hydrogen pressure in the said reactor falls to a second value lower than the first value.

Claim 15 (original) A chemical hydride hydrogen generation system as claimed in any of the preceding claims, wherein the system further includes a heat exchanger for the said reactor capable of, separately, removing heat from the said reactor and supplying heat to said reactor.

Claim 16 (withdrawn) An energy system, comprising:

a fuel cell for generating electricity and water from hydrogen and an oxidant;

a chemical hydride hydrogen generation system, comprising:

a storage means for storing a chemical hydride solution comprising a solution of a chemical hybrid solute in a solvent;

a reactor containing a catalyst, catalyzing reaction of the chemical hydride to generate hydrogen;

a first supplying means, connected between the storage device and the reactor, for supplying the chemical hydride solution from said storage to said reactor so that the chemical hydride solution reacts to generate hydrogen in the presence of the catalyst;

a connection between said reactor and said fuel cell for supplying hydrogen to the fuel cell; and

a recovery means for recovering the water generated in the said fuel cell and supplying the recovered water to the chemical hydride solution during the reaction as the chemical hydride solution is consumed in use.

Claim 17 (previously presented) A chemical hydride hydrogen generation system as claimed in claim 1, including a recovery means for connection to a fuel cell for recovering water generated in the fuel cell and further including a gas-water separator.

Claim 18 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 17, wherein the said recovery means further includes a catalytic burner for connection to the fuel cell and the gas-water separator, and wherein said catalytic burner includes inlets for connection to outlets of the fuel cell for excess oxidant and hydrogen so as to bring ~~the~~ unreacted hydrogen and ~~the~~ oxygen in ~~the~~ exhaust gas from the said fuel cell into reaction to form water.

Claim 19 (currently amended) A chemical hydride hydrogen generation system as claimed in claim 18, including a first valve for connection to the outlet of the fuel cell for excess hydrogen, and to the catalytic burner and to a hydrogen recycle line for connection to an inlet of the fuel cell, selectively allowing ~~the~~ excess hydrogen leaving

the fuel cell after reaction to be circulated back to the said fuel cell in a first mode and allowing the hydrogen to be supplied to the catalytic burner from the said fuel cell in a second mode.

Claim 20 (previously presented) A chemical hydride hydrogen generation system as claimed in claim 19, wherein the said system further includes a first control means that operatively switches the first valve between the first and second modes.

Claim 21 (previously presented) A chemical hydride hydrogen generation system as claimed in any of the claims 17 to 20, further including a filtering means connected to the reactor for purifying the hydrogen generated in the said reactor before the hydrogen is supplied to the fuel cell.

Claim 22 (previously presented) A chemical hydride hydrogen generation system as claimed in any of the claims 17 to 20, wherein the system further includes a second control means that operatively stops the first supplying device when the hydrogen pressure in the reactor reaches a first value and activates the first supplying device when the hydrogen pressure in the reactor falls to a second value lower than the first value.

Claim 23 (previously presented) A chemical hydride hydrogen generation system as claimed in any of the claims 17 to 20, wherein the system further includes a heat exchanging means for the reactor that selectively removes heat from the said reactor and heats up the reactor to control the hydrogen generation reaction.

Claim 24 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution is a borohydride hydride water solution.

Claim 25 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution is a water solution in which the solute is in the form of the form of $MB[x]_xH[y]_y$, wherein M is a metal.

Claim 26 (withdrawn) An energy system as claimed in claim 25, wherein the solute is selected from the group consisting of: $NaBH[4]_4$, $LiBH[4]_4$, $KBH[4]_4$, $RbBH[4]_4$.

Claim 27 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution is a water solution in which the solute is $NaBH[4]_4$ and less than 5% $LiBH[4]_4$.

Claim 28 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution is a water solution in which the solute is $NH[3]_3BH[3]_3$.

Claim 29 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution further includes a freezing point depressing agent.

Claim 30 (withdrawn) An energy system as claimed in claim 29, wherein the freezing point depressing agent is glycerol.

Clam 31 (withdrawn) An energy system as claimed in claim 30, wherein concentration of is glycerol less than 5% by weight.

Claim 32 (withdrawn) An energy system as claimed in claim 31, wherein concentration of glycerol is 1% by weight.

Claim 33 (withdrawn) An energy system as claimed in claim 16, wherein the chemical hydride solution further includes an alkaline additive.

Claim 34 (withdrawn) An energy system as claimed in claim 33, wherein the alkaline additive is selected from LiOH, KOH, and NaOH.

Claim 35 (withdrawn) A chemical hydride hydrogen generation system as claimed in claim 34, wherein the alkaline additives is 0.1% NaOH by weight.

Claim 36 (withdrawn) An energy system as claimed in any one of claims 16 to 20, wherein said fuel cell comprises a fuel cell stack including a plurality of fuel cells.

Claim 37 (withdrawn) A method of generating and supplying hydrogen to a fuel cell, the method comprising:

(a) providing a supply of a solution comprising a solvent and a chemical hydride dissolved therein;

(b) when hydrogen is required, supplying the solution to a reactor containing a catalyst to catalyze reaction of the chemical hydride to generate hydrogen;

(c) delivering the generated hydrogen to the fuel cell;

(d) recovering water from consumption of hydrogen in the fuel cell;

(e) supplying recovered water to the supply of the solution, to compensate for water consumed during reaction of the hydride to generate hydrogen, and to promote maintenance of concentration levels for products of the reaction generating hydrogen at acceptable levels, thereby to delay onset of any precipitation of said products tending to limit generation of hydrogen.